IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application : **10/518,843**

Applicant(s) : **SCHNEIDEREIT et al.**

Filed : **12/21/2004**

Confirmation : **1284**

T.C./Art Unit : **2627**

Examiner : **PHAM, Van T.**

Atty. Docket : **AT-020044**

Title: **METHOD AND ARRANGEMENT FOR THE GENERATION OF AN IDENTIFICATION DATA BLOCK**

Mail Stop: **APPEAL BRIEF - PATENTS**
Commissioner for Patents
Alexandria, VA 22313-1450

APPEAL UNDER 37 CFR 41.37

Sir:

This is an appeal from the decision of the Examiner dated 5 February 2007, rejecting claims 1-11 and 15-23 of the subject application, wherein one or more of the claims are at least twice rejected.

This paper includes (each beginning on a separate sheet):

1. **Appeal Brief;**
2. **Claims Appendix;**
3. **Evidence Appendix; and**
4. **Related Proceedings Appendix.**

APPEAL BRIEF

I. REAL PARTY IN INTEREST

The above-identified application is assigned, in its entirety, to **Koninklijke Philips Electronics N. V.**

II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any co-pending appeal or interference that will directly affect, or be directly affected by, or have any bearing on, the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 12-14 are canceled.

Claims 1-11 and 15-23 are pending in the application.

Claims 1-11 and 15-23 stand rejected by the Examiner under 35 U.S.C. 103(a).

Claims 17-18 stand rejected by the Examiner under 35 U.S.C. 101.

These rejected claims are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the Office Action dated 5 February 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

This invention addresses a method and system for creating an identification data block for a data carrier that includes one or more tracks (Applicants' page 1, lines 1-2). For example, the identification data block can be used as a unique identifier of a CD or DVD based on the sound or video tracks within the disk (page 1, lines 21-29). In an example embodiment, a first part of the identification data block is formed by an exclusive-OR (XOR) of starting position information related to the

tracks, a second part is formed from the total number of tracks, and the overall identification data block is formed by an exclusive-OR function that includes these first and second parts (page 3, lines 9-14). By using the claimed combination of XOR functions, a greater range of diversity is provided, thereby providing unique identifiers to a large number of data carriers (page 4, lines 8-14). Additionally, this diversification extends across data carriers having only a few tracks (page 4, lines 20-21).

As claimed in independent claim 1, an embodiment of the invention comprises a method of generating an identification data block for a data carrier (41), which data carrier comprises at least one track, wherein each track is defined by an item of start position information (page 3, lines 6-8), wherein the identification data block is formed from part identification blocks by means of a gating function (page 3, lines 8-9), wherein a first part identification block is formed from the items of start position information (page 3, lines 9-10) and a second part identification block is formed from a total number of tracks on the data carrier (page 3, lines 10-11), characterized in that the first part identification block is formed from the items of start position information by means of an XOR gating operation (page 3, lines 11-13; page 4, lines 12-14; page 9, lines 17-20; 225 of FIG. 2) and an XOR gating operation is then likewise used as a gating function (page 3, lines 13-14; page 4, lines 9-10; page 9, table 3).

As claimed in independent claim 8, an embodiment of the invention comprises an arrangement for generating an identification data block for a data carrier, which data carrier comprises at least one track (page 3, lines 18-19), wherein each track is defined by an item of start position information (page 3, lines 19-20), which arrangement comprises the means listed hereafter, namely determining means for determining the item of start position information (page 3, lines 20-21), gating means for generating the identification data block by the gating of part identification blocks (page 3, lines 21-22), first generating means for generating a first part identification block from the items of start position information (page 3, lines 22-24) and second

generating means for generating a second part identification block from a total for the number of tracks on the data carrier (page 3, lines 24-25), characterized in that the first generating means are arranged to generate the first part identification block by means of an XOR gating operation (page 3, lines 25-27; page 4, lines 12-14; page 9, lines 17-20; 225 of FIG. 2) and in that the gating means are arranged to generate the identification data block by means of an XOR function (page 3, lines 27-28;page 4, lines 9-10; page 9, table 3).

As claimed in independent claim 17, an embodiment of the invention comprises a computer software product that, when loaded on a computer system, causes the computer system to (page 3, line 32 – page 4, line 2)

generate an identification data block for a data carrier that comprises at least one track (page 3, lines 6-7),

wherein:

each track is defined by an item of start position information (page 3, lines 7-8),

the identification data block is formed from part identification blocks by means of a gating function (page 3, lines 8-9),

a first part identification block is formed from the items of start position information (page 3, lines 9-10),

a second part identification block is formed from a total for the number of tracks on the data carrier (page 3, lines 10-11),

the first part identification block is formed from the items of start position information by means of an XOR gating operation (page 3, lines 11-13; page 4, lines 12-14; page 9, lines 17-20; 225 of FIG. 2), and

an XOR gating operation is then likewise used as a gating function (page 3, lines 13-14; page 4, lines 9-10; page 9, table 3).

As claimed in independent claim 19, an embodiment of the invention comprises a system (FIG. 1) comprising:

a device (40) that is configured to provide data that is stored on a medium (41), the data including a plurality of identifiable segments (page 3, lines 6-7),

a processing unit (50) that is configured to create an identifier associated with the data,

wherein

the processing unit (50) includes:

a first generator (54) that is configured to create a first element based on an exclusive-OR (XOR) function applied to start positions of the identifiable segments of the data (page 9, lines 10-20; 225 of FIG. 2), and

a second generator (55) that is configured to create a second element based on a total number of the identifiable segments of the data (page 11, lines 6-8), and

a gating device (59) that is configured to create the identifier based on an exclusive-OR function applied to the first and second elements (page 8, lines 23-26; page 9, table 3).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-11 and 15-23 stand rejected under 35 U.S.C. 103(a) over Woodward (USPA 2003/0028721) and Kawamura et al. (USP 6,424,614, hereinafter Kawamura).

Claims 17 and 18 stand rejected under 35 U.S.C. 101.

VII. ARGUMENT

Claims 1-11 and 15-23 stand rejected under 35 U.S.C. 103(a) over Woodward and Kawamura

MPEP 2142 states:

> "To establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) ***must teach or suggest all the claim limitations***... If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness."

Claims 1-7 and 15-16

The combination of Woodward and Kawamura fails to teach or suggest a method for generating an identification data block for a data carrier, wherein an XOR gating function is used to form the identification data block from first and second part identification blocks, and the first part identification block is formed from items of start position information by means of an XOR gating operation, as specifically claimed in claim 1, upon which claims 2-7 and 15-16 depend.

The Office action acknowledges that Woodward fails to teach or suggest using an XOR gating function to form an identification data block from first and second part identification blocks, and fails to teach forming the first part identification block from items of start position information by means of an XOR gating operation, and relies on Kawamura for this teaching.

The Office action merely cites "Figs. 10-15" of Kawamura for teaching an XOR gating function to form an identification data block and an XOR gating operation to form a first part identification block from items of start position information. The applicants note that Kawamura's figures 10-15 fail to show an XOR operation, and thus the Examiner has failed to produce a prima facie case to support this rejection.

In response to the applicants' arguments to this effect, the Examiner refers to "cols. 6-8" of Kawamura. The applicants acknowledge that Kawamura teaches the use of an XOR function in the cited columns to determine a sector address on a disk, but respectfully note that this XOR function is not applied to form an identification data block from partial identification data blocks, and is not applied to form a partial

identification data block based on start locations of tracks, as specifically claimed in claim 1.

The Board of Patent Appeals and Interferences has consistently upheld the principle that the burden of establishing a prima facie case resides with the Office, and to meet this burden, the Examiner must specifically identify where each of the claimed elements are found in the prior art (see, for example, *Ex Parte Naoya Isoda*, Appeal No. 2005-2289, Application 10/064,508 (BPAI Opinion October 2005)). The Office action has failed to identify where each of the claimed limitations can be found in either Woodward or Kawamura, and thus has failed to establish a prima facie case.

Because the combination of Woodward and Kawamura fails to teach each of the elements of claim 1, the applicants respectfully maintain that the rejection of claims 1-7 and 15-16 under 35 U.S.C. 103(a) over Woodward and Kawamura is unfounded, per MPEP 2142, and should be reversed.

Claims 8-11

The combination of Woodward and Kawamura fails to teach or suggest an arrangement for generating an identification data block for a data carrier that includes first generating means that are arranged to generate the first part identification block by means of an XOR gating operation, and gating means that are arranged to generate the identification data block by means of an XOR function, as specifically claimed in claim 8, upon which claims 9-11 depend.

The Office action relies upon the rejection of claim 1 to support the rejection of claim 8. As noted above, the combination of Woodward and Kawamura fails to teach the elements of claim 1, or the elements of claim 8.

Because the combination of Woodward and Kawamura fails to teach each of the elements of claim 8, the applicants respectfully maintain that the rejection of claims 8-11 under 35 U.S.C. 103(a) over Woodward and Kawamura is unfounded, per MPEP 2142, and should be reversed.

Claims 17-18

The combination of Woodward and Kawamura fails to teach or suggest a computer software product that causes a computer system to generate an identification data block for a data carrier, wherein a gating function is used to form the identification data block from first and second part identification blocks, and a first part identification block is formed from items of start position information by means of an XOR gating operation, as specifically claimed in claim 17, upon which claim 18 depends.

The Office action relies upon the rejection of claim 1 to support the rejection of claim 17. As noted above, the combination of Woodward and Kawamura fails to teach the elements of claim 1, or the elements of claim 17.

Because the combination of Woodward and Kawamura fails to teach each of the elements of claim 17, the applicants respectfully maintain that the rejection of claims 17-18 under 35 U.S.C. 103(a) over Woodward and Kawamura is unfounded, per MPEP 2142, and should be reversed.

Claims 19-23

The combination of Woodward and Kawamura fails to teach or suggest a system that includes a gating device that is creates an identifier based on an exclusive-OR function applied to first and second elements, and a first generator that is configured to create the first element based on an exclusive-OR (XOR) function applied to start positions of identifiable segments of data, as specifically claimed in claim 19, upon which claims 20-23 depend.

The Office action relies upon the rejection of claim 1 to support the rejection of claim 19. As noted above, the combination of Woodward and Kawamura fails to teach the elements of claim 1, or the elements of claim 19.

Because the combination of Woodward and Kawamura fails to teach each of the elements of claim 19, the applicants respectfully maintain that the rejection of claims 19-23 under 35 U.S.C. 103(a) over Woodward and Kawamura is unfounded, per MPEP 2142, and should be reversed.

Claims 17-18 stand rejected under 35 U.S.C. 101

Claims 17-18

The Office action asserts that claims 17 and18 claim a computer listing per se, and thus these claims are not statutory subject matter.

MPEP 2106.IV.B.1 states:

> "computer programs **claimed as computer listings *per se***, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed... In contrast, ... structural and functional interrelationships between the computer program and the rest of the computer which **permit the computer program's functionality to be realized ... is thus statutory**." (Bold emphasis added.)

Claim 17 claims a computer software product that, when loaded on a computer system, causes the computer system to perform certain actions. Claims 17 and 18 do not claim a computer listing per se; rather, they define a program that is configured to permit the computer program's functionality to be realized, and thus constitute statutory subject matter, per MPEP 2106.

CONCLUSIONS

Because the combination of Woodward and Kawamura fails to teach using an XOR gating function to form an identification data block from first and second part identification blocks, and because this combination also fails to teach forming the first part identification block from items of start position information by means of an XOR gating operation, as specifically claimed in each of the applicants' independent claims, the applicants respectfully request that the Examiner's rejection of claims 1-11 and 15-23 under 35 U.S.C. 103(a) over Woodward and Kawmura be reversed by the Board, and the claims be allowed to pass to issue.

Because claims 17 and 18 define a program that is configured to permit the computer program's functionality to be realized, the applicants respectfully request that the Examiner's rejection of claims 17 and 18 under 35 U.S.C. 101 be reversed by the Board, and the claims be allowed to pass to issue.

Respectfully submitted

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CLAIMS APPENDIX

1. A method of generating an identification data block for a data carrier, which data carrier comprises at least one track, wherein each track is defined by an item of start position information, wherein the identification data block is formed from part identification blocks by means of a gating function, wherein a first part identification block is formed from the items of start position information and a second part identification block is formed from a total number of tracks on the data carrier, characterized in that the first part identification block is formed from the items of start position information by means of an XOR gating operation and an XOR gating operation is then likewise used as a gating function.

2. A method as claimed in claim 1, wherein at least one track comprises a number of files having file names, use being made for generating the identification data block of, in addition, the file names to generate a third identification data block.

3. A method as claimed in claim 2, wherein characters of the file names are each individually gated by an XOR function.

4. A method as claimed in claim 2, wherein use is made for generating the identification data block of, in addition, a fourth part identification block, the total number of files, which is formed by the number of files, being used to generate the fourth identification data block.

5. A method as claimed in claim 1, wherein a data block having four bytes is generated as an identification data block.

6. A method as claimed in claim 5, wherein a data block having a single byte is generated as a second part identification data and while generating the identification data block by the XOR gating to generate the identification data block, the second part identification block is set to a fourth byte position in the identification data block.

7. A method as claimed in claim 5, wherein a data block having three bytes is generated as a first part identification block and while generating the identification data block by the XOR gating to generate the identification data block, the second part identification block is set to ~~the~~ a second byte position in the identification data block.

8. An arrangement for generating an identification data block for a data carrier, which data carrier comprises at least one track, wherein each track is defined by an item of start position information, which arrangement comprises the means listed hereafter, namely determining means for determining the item of start position information, gating means for generating the identification data block by the gating of part identification blocks, first generating means for generating a first part identification block from the items of start position information and second generating means for generating a second part identification block from a total for the number of tracks on the data carrier, characterized in that the first generating means are arranged to generate the first part identification block by means of an XOR gating operation and in that the gating means are arranged to generate the identification data block by means of an XOR function.

9. An arrangement as claimed in claim 8, wherein third generating means are provided that are arranged to generate a third part identification block from file names of files that are contained in the tracks on the data carrier.

10. An arrangement as claimed in claim 9, wherein the third generating means are arranged to generate a third part identification block by means of an XOR gating operation.

11. An arrangement as claimed in claim 8, wherein fourth generating means are provided that are arranged to generate a fourth part identification block for generating the identification data block, a total number of files that represents the number files that are contained in the tracks on the data carrier being used for this purpose.

12-14 (Canceled)

15 The method according to claim 1 wherein the reproducing arrangement includes receiving means for receiving a data carrier.

16 The method according to claim 15 wherein the receiving means is a changer module that is arranged to reproduce information or data that has been stored digitally, the digitally stored information being stored on the data carriers for optical reading and rotated at an angular velocity .

17. A computer software product that, when loaded on a computer system, causes the computer system to

generate an identification data block for a data carrier that comprises at least one track,

wherein:

each track is defined by an item of start position information,

the identification data block is formed from part identification blocks by means of a gating function,

a first part identification block is formed from the items of start position information,

a second part identification block is formed from a total for the number of tracks on the data carrier,

the first part identification block is formed from the items of start position information by means of an XOR gating operation, and

an XOR gating operation is then likewise used as a gating function.

18. A computer software product as claimed in claim 17, wherein the product is stored on a computer-readable medium.

19. A system comprising:

a device that is configured to provide data that is stored on a medium, the data including a plurality of identifiable segments,

a processing unit that is configured to create an identifier associated with the data,

wherein

the processing unit includes:

a first generator that is configured to create a first element based on an exclusive-OR (XOR) function applied to start positions of the identifiable segments of the data, and

a second generator that is configured to create a second element based on a total number of the identifiable segments of the data, and

a gating device that is configured to create the identifier based on an exclusive-OR function applied to the first and second elements.

20. The system of claim 19, wherein

at least one segment includes one or more files, and

the processing unit includes a third generator that is configured to create a third element based on names of the one or more files, and

the gating device is configured to create the identifier based on an exclusive-OR function applied to the third element.

21. The system of claim 20, wherein

the third element is based on an exclusive-OR function applied to two or more characters of the names.

22. The system of claim 20, wherein

the processing unit includes a fourth generator that is configured to create a fourth element based on a total number of the one or more files.

23. The system of claim 19, wherein

the processing unit includes a third generator that is configured to create a third element based on a time duration associated with the data, and

the gating device is configured to create the identifier based on an exclusive-OR function applied to the third element.

EVIDENCE APPENDIX

No evidence has been submitted that is relied upon by the appellant in this appeal.

RELATED PROCEEDINGS APPENDIX

Appellant is not aware of any co-pending appeal or interference which will directly affect or be directly affected by or have any bearing on the Board's decision in the pending appeal.